



## three-ridge

*Amblema plicata*

Kingdom: Animalia  
Division/Phylum: Mollusca  
Class: Bivalvia

## Features

The three-ridge mussel has an elongate or rounded, thick shell. Three or more nearly parallel ridges or folds are present on the posterior half of the shell. Both ends of the shell are rounded. The outside of the adult's shell is brown or black. Juvenile shells tend to be green. The inside of the shell is pearly white, sometimes with a purple tint on one end. The three-ridge may grow to seven inches long.

## Natural History

The three-ridge lives in rivers and impoundments with a mud, sand, or gravel bottom. Freshwater mussel distribution in Iowa is not well documented. They have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female generally expels them into the water where they must attach as parasites to the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host

and drop to the bottom of the body of water. There are fifteen species of fish that serve as hosts for this mussel. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

## Habitats

interior rivers and streams; constructed lakes, ponds, and reservoirs; Mississippi River

## Iowa Status

common; native

## Iowa Range

northeastern two-thirds of Iowa

## Bibliography

Iowa Department of Natural Resources. 2001.  
*Biodiversity of Iowa: Aquatic Habitats* CD-ROM.